

NC Health Choice Annual Utilization Study October 1998 Through September 2000

Introduction

This document provides health care cost and utilization data for members of the North Carolina Health Choice (NCHC) group for services incurred from October 1998 through September 2000. The data have not been adjusted for outstanding claims.

Norms are based on all youth (under age 19) from the State of North Carolina Teachers' and State Employees' Comprehensive Major Medical Plan. Norms have not been age and sex adjusted.

"Costly" admissions (admissions incurring more than \$50,000 in allowed charges or with a length of stay in excess of 30 days) have been excluded from utilization rate and charge statistics. However, payment data include these admissions. Table 17 lists the costly admissions.

Because there were so few members in the Extended Coverage segment, their utilization and cost behaviors are not analyzed. However, their data are included in the tables.

Demographics

The average monthly enrollment from October 1999 through September 2000 (FY 2000) was 66,007 members. Non-Copay members comprised over two-thirds of this total. The sex distribution of both segments was about half male and half female. More than half of all members were between 6 and 12 years old. Most members were white (53 percent), while 35 percent were black.

Membership was nearly double that of FY 1999 (October 1998 through September 1999). Such a dramatic change in membership may significantly impact utilization patterns.

Inpatient Utilization and Average Charges

Utilization decreased significantly during FY 2000 primarily due to a significant decline in utilization by the Copay segment. Utilization was below the norm for both segments.

The average charge per admission rose moderately due to an increase for the Non-Copay segment. The average charge per day dropped slightly.

Respiratory diseases, injury and poisoning, digestive diseases, and mental disorders accounted for more than 50 percent of all admissions. The admission rates for most diagnostic categories were similar to those of last year (except for neoplasms and mental disorders, which decreased).

Outpatient Utilization and Average Charges

In all three settings (hospital outpatient, emergency room, and ambulatory surgery), utilization exceeded the norms in FY 2000. Utilization remained stable for the hospital outpatient setting, dropped moderately for the emergency room setting, and increased slightly for ambulatory surgeries between FY 1999 and FY 2000.

**NC Health Choice
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In the emergency room setting, the non-urgent and urgent utilization rates were well above their norms, while the emergent rate was much closer to its norm.

In all settings, and in both segments, the average charge per visit was below the norm.

Office Visit Utilization and Average Charges

The office visit utilization rate remained stable, reflecting a slight increase in the visit rate to specialists and a slight decrease in the rate for primary care visits. Utilization for both settings was below the norm. On the other hand, the average charge per visit (which increased in both settings) was consistent with the norm.

Overall, outpatient utilization of mental health services was higher than the norm. The drug abuse visit rate, which in FY 1999 was significantly higher than the norm, dropped significantly and was below the norm in FY 2000.

Payments

Payments per member per month remained stable in FY 2000 and were significantly higher than the norm.

Institutional payments for the Copay segment decreased significantly due to the decrease in inpatient utilization. For both segments, institutional payments were similar to the norm.

The increase in professional payments was attributable, primarily, to higher drug payments. Professional payments were much higher than the norm.

Payments for mental disorders, diseases of the nervous system, respiratory diseases, ill defined conditions, and payments for "other" (including drugs) were all higher than the norm.

Costly admissions (admissions which incurred costs greater than \$50,000 or hospital stays greater than 30 days) added nearly \$4 to the pmpm payment.

Table 1
NC Health Choice
Demographics - Average Annual Enrollment
October 1999 Through September 2000

Age Groups

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total</u>
0	1	32	0	33
1 - 5	6,346	7,383	16	13,745
6 - 12	24,682	8,736	17	33,435
13 - 18	13,756	4,625	12	18,393
19 +	318	83	0	401
Total	45,103	20,859	45	66,007

Gender

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total</u>
Female	22,309	10,135	22	32,466
Male	22,794	10,724	23	33,541
Total	45,103	20,859	45	66,007

Ethnicity

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total</u>
Asian	610	231	0	841
Black	17,346	5,444	9	22,799
Hispanic	2,522	1,366	1	3,889
Indian	938	435	2	1,374
White	22,204	12,642	32	34,878
Other	1,358	648	0	2,007
Unknown	125	94	0	219
Total	44,978	20,765	45	66,007

Table 2
NC Health Choice
Demographics - Percentage of Membership
October 1999 Through September 2000

Age Groups

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total</u>
0 years	0%	0%	0%	0%
1 - 5 years	14%	35%	35%	21%
6 - 12 years	55%	42%	38%	51%
13 - 18 years	30%	22%	28%	28%
19 + years	1%	0%	0%	1%

Gender

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total</u>
Female	49%	49%	50%	49%
Male	51%	51%	50%	51%

Ethnicity

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total</u>
Asian	1%	1%	0%	1%
Black	38%	26%	20%	35%
Hispanic	6%	7%	2%	6%
Indian	2%	2%	4%	2%
White	49%	61%	72%	53%
Other	3%	3%	1%	3%

Figure 1: Membership Distribution by Age

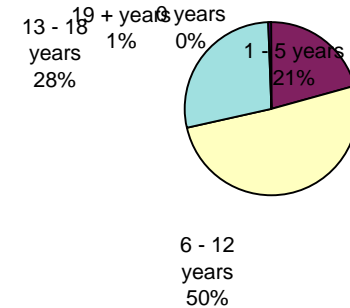
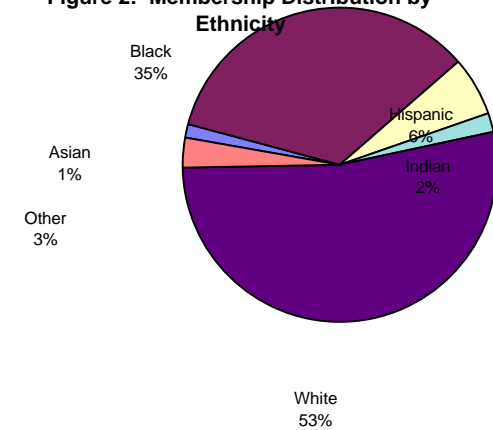
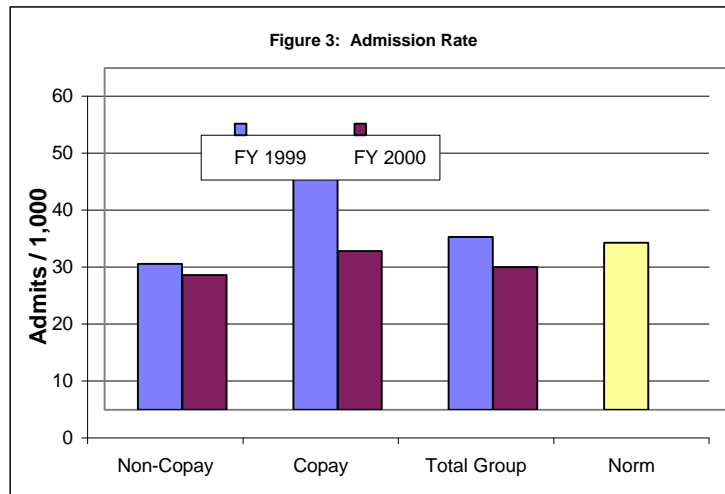


Figure 2: Membership Distribution by Ethnicity



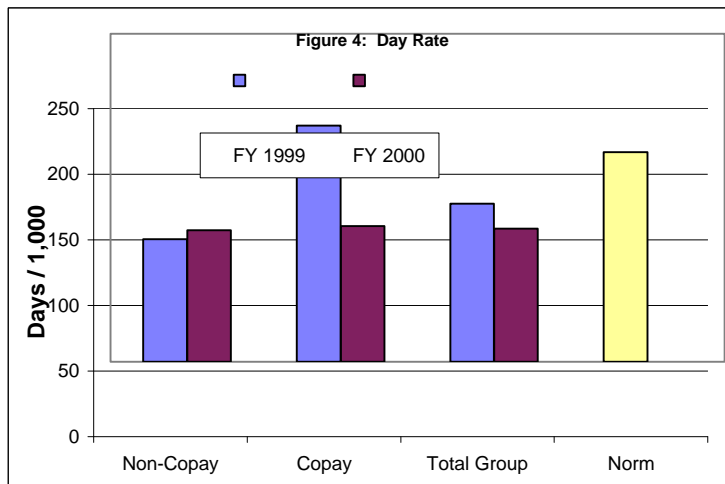
NC Health Choice Inpatient Utilization October 1998 Through September 2000



The admission rate for the total group decreased 17 percent to 25.1 admissions per 1,000 members (Table 3). The rate was 15 percent below the norm.

While the admission rate for the Non-Copay segment decreased moderately, that of the Copay segment fell 32 percent. Both were below the norm.

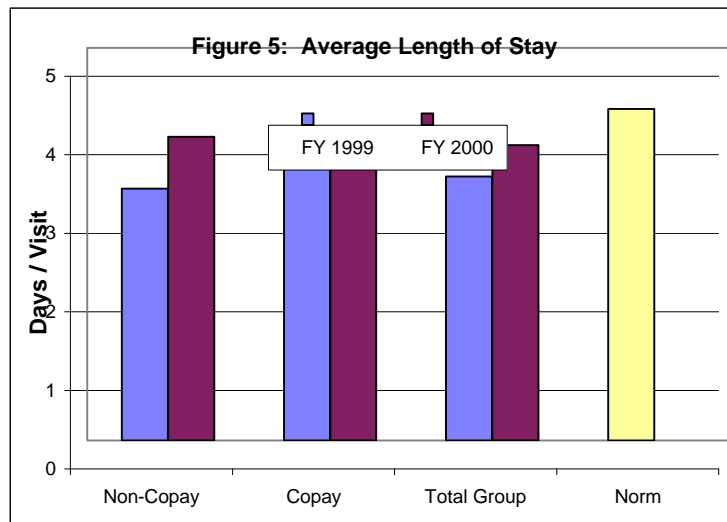
Respiratory diseases, digestive diseases, injury and poisoning, and mental disorders accounted for more than half of all admissions (Table 4). The admission rates for neoplasm and mental disorders were much higher than last year (data not shown). The admission rates for endocrine disorders, mental disorders, respiratory diseases, and digestive diseases were much higher than the norm.



The day rate for the total group decreased 16 percent to 101.5 hospital days per 1,000 members. The rate was 36 percent below the norm.

A small increase in the day rate for the Non-Copay segment was offset by a significant decrease in that of the Copay segment. Both were well below the norm.

NC Health Choice Inpatient Utilization October 1998 Through September 2000



The average length of stay for the total group increased 12 percent to 3.8 hospital days per visit. The rate was 11 percent below the norm.

Although the average length of stay increased for the Non-Copay segment, it remained below the norm. The average length of stay remained constant for the Copay members.

The increase among Non-Copay members suggest that they experienced more severe illnesses than in the past.

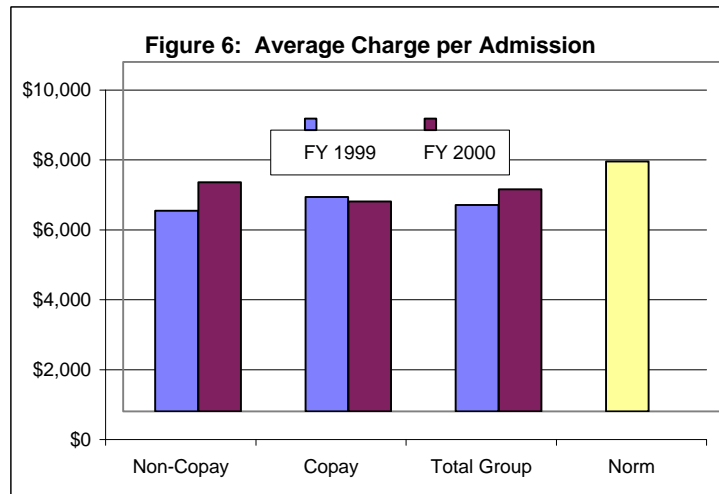
Utilization rates often fluctuate dramatically when the membership changes significantly. The decrease in the utilization rates for the NCHC group may reflect changes in membership rather than a trend toward lower utilization.

As in FY 1999, UNC Hospitals had the most admissions in FY 2000 (Table 5). In addition, UNC Hospitals had the highest average allowed charge per admission and the third highest average length of stay. Frye Regional Medical Center had the highest average length of stay.

Mecklenburg and Buncombe Counties had the highest number of admissions (Table 6). Mecklenburg County also had the greatest membership. Among counties with more than 10 admissions, Craven County had the greatest average length of stay (11.7 days) as well as the highest average allowed charge (\$21,644 per admission).

While the inpatient utilization rates for mental disorders increased for acute care hospitals (Table 7), they decreased for psychiatric facilities (Table 8). Much of the change was due to utilization by the Non-Copay members. Overall utilization exceeded the norm for both settings.

NC Health Choice Inpatient Charges October 1998 Through September 2000

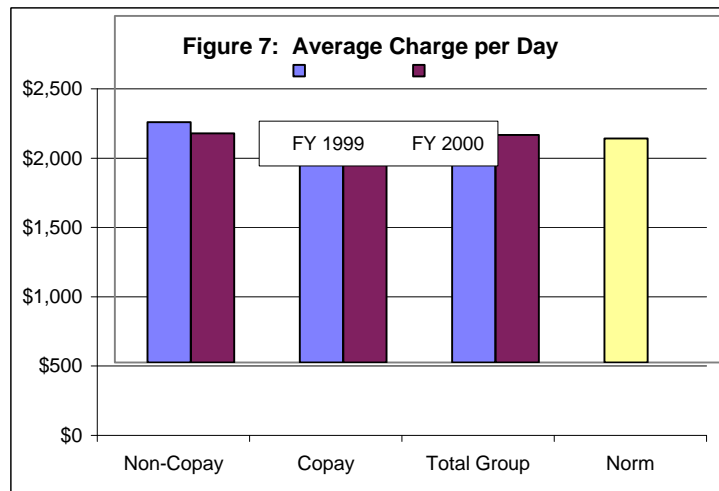


Although the average charge per admission during FY 2000 increased 8 percent to \$6,359, it remained well below the norm (Table 3).

The increase in the average charge was attributable to a 14 percent increase in the average charge for the Non-Copay segment. This increase for the Non-Copay segment was consistent with the increase in their average length of stay (page 6).

As noted earlier, of the counties with at least 10 admissions, Craven County had the highest average charge per admission. Cherokee County had the lowest (Table 6).

The average charge per mental health admission increased 26 percent for acute care hospitals but was consistent with the norm (Table 7). Among psychiatric hospitals, the average charge remained stable but was 13 percent above the norm (Table 8).



The average charge per day decreased 4 percent to \$1,642 (Table 3). This was consistent with the norm.

The average charge for both segments decreased slightly in FY 2000.

Among acute care hospitals, the average charge per day for psychiatric admissions increased 6 percent in FY 2000 (Table 7). It was consistent with the norm. The average charge per day at psychiatric hospitals decreased 5 percent and was well below the norm (Table 8).

Table 3
NC Health Choice
Inpatient Utilization Statistics, Acute-Care General Hospitals
October 1999 Through September 2000

	<u>Non-Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Participants	23,701	45,103	10,866	20,859	.	45	34,567	66,007	--
Admissions	607	1,067	442	581	.	6	1,049	1,654	--
Days	1,933	4,516	1,560	2,155	.	27	3,493	6,698	--
Admissions/1000	25.6	23.7	40.7	27.9	.	133.3	30.3	25.1	29.3
Days/1000	93.4	100.1	179.9	103.3	.	600.0	120.6	101.5	159.7
Average Length of Stay ¹	3.21	3.87	3.58	3.56	.	4.5	3.36	3.76	4.22
Average Allowed Charge/Adm. ¹	\$5,737	\$6,560	\$6,133	\$6,009	.	\$4,543	\$5,904	\$6,359	\$7,153
Institutional	\$4,396	\$5,101	\$4,787	\$4,674	.	\$3,853	\$4,560	\$4,946	\$5,407
Professional	\$1,342	\$1,459	\$1,346	\$1,335	.	\$690	\$1,344	\$1,414	\$1,746
Average Allowed Charge/Day ¹	\$1,733	\$1,652	\$1,673	\$1,631	.	\$994	\$1,706	\$1,642	\$1,616
Institutional	\$1,354	\$1,294	\$1,315	\$1,260	.	\$856	\$1,336	\$1,281	\$1,265
Professional	\$379	\$358	\$359	\$371	.	\$138	\$370	\$361	\$351

¹ Outlier claims (claims with a length of stay greater than 30 days or a total charge greater than \$50,000) have been excluded from these calculations.

Table 4
NC Health Choice
Inpatient Utilization Statistics by Diagnostic Classification
Acute Care Hospitals
October 1999 Through September 2000

	<u>Admissions per 10,000</u> <u>Members</u>		<u>Percentage of Total</u> <u>Admissions</u>	
	<u>NCHC</u>	<u>Norm</u>	<u>NCHC</u>	<u>Norm</u>
Infectious and Parasitic Diseases	15.9	12.5	6.3%	4.3%
Neoplasms	9.5	12.2	3.8%	4.2%
Endocrine, Nutritional and Metabolic Diseases and Immunity Disorders	21.7	16.4	8.6%	5.6%
Diseases of Blood and Blood-Forming Organs	7.4	8.7	3.0%	3.0%
Mental Disorders	26.2	21.2	10.5%	7.2%
Diseases of the Nervous System and Sense Organs	6.4	8.7	2.5%	3.0%
Circulatory Diseases	2.7	2.2	1.1%	0.7%
Respiratory Diseases	53.9	49.4	21.5%	16.9%
Digestive Diseases	30.0	22.9	12.0%	7.8%
Genitourinary Diseases	11.5	12.5	4.6%	4.3%
Pregnancies	4.2	24.2	1.7%	8.3%
Skin Diseases	5.8	3.2	2.3%	1.1%
Musculoskeletal Diseases	7.9	5.7	3.1%	1.9%
Congenital Anomalies	4.5	10.7	1.8%	3.6%
Perinatal Conditions	0.2	37.9	0.1%	12.9%
Ill-Defined Conditions	13.6	12.5	5.4%	4.3%
Injury and Poisoning	28.2	31.1	11.2%	10.6%
Other	0.9	1.3	0.4%	0.5%

Table 5
NC Health Choice
Top 25 Most Frequently Used Hospitals
October 1999 Through September 2000

	<u>Number of Admissions</u>	<u>Average Length of Stay</u>	<u>Average Allowed Charge per Admission</u>
U N C HOSPITALS	135	6.94	\$9,995
MEMORIAL MISSIO N HOSP	123	4.64	\$5,843
NORTH CAROLINA BAPTIST HO	111	4.99	\$8,373
PITT CO MEMORIA L HOSP	72	6.04	\$9,392
CAROLINAS MED CTR	67	3.45	\$5,886
DUKE UNIVERSITY HOSPITAL	61	4.85	\$8,952
CAPE FEAR VALLE Y MED CTR	51	3.84	\$4,394
OUT OF STATE	42	5.81	\$6,416
GASTON MEM HOSPITAL	38	4.55	\$4,821
WAKE MED	36	2.64	\$3,868
COLUMBUS CO HOS P	36	2.44	\$3,060
THE MOSES CONE MEMORIAL	33	3.45	\$3,799
LENOIR MEM HOSP ITAL	31	2.42	\$2,539
FRYE REGIONAL MED CTR	30	9.33	\$6,031
NEW HANOVER REG MEDICAL CT	30	3.77	\$5,528
PRESBYTERIAN HO SP	30	4.77	\$5,225
SOUTHEASTERN GE N HOSP	30	4.13	\$4,073
FIRSTHEALTH RICHMOND	30	2.33	\$2,466
NORTHEAST MED CENTER	27	2.22	\$3,327
WAYNE MEMORIAL HOSPITAL	26	5.92	\$6,483
HARRIS REGIONAL HOSPITAL	22	3.09	\$3,501
THE BEHAVIORIAL HLTH CTR	19	7.42	\$4,292
ROWAN REGIONAL MED CTR IN	19	2.21	\$3,457
ONslow MEM HOSPITAL	19	1.95	\$3,428
WATAUGA MEDICAL CENTER	18	2.78	\$2,858
ALL OTHERS	518	2.72	\$3,455

Table 6
NC Health Choice
Utilization by County of Residence
October 1999 Through September 2000

	<u>Members</u>	<u>Admissions</u>	<u>Average Length of Stay</u>	<u>Average Charge per Admission</u>
ALAMANCE	921	20	5.70	\$11,547
ALEXANDER	267	10	4.00	\$6,360
ALLEGHANY	129	7	1.86	\$2,706
ANSON	213	17	3.82	\$7,221
ASHE	375	11	3.36	\$3,566
AVERY	355	8	2.88	\$4,071
BEAUFORT	501	9	2.67	\$3,972
BERTIE	281	5	2.20	\$2,649
BLADEN	502	13	2.38	\$4,596
BRUNSWICK	929	27	5.11	\$8,262
BUNCOMBE	1,996	71	5.86	\$11,108
BURKE	572	13	5.92	\$6,396
CABARRUS	878	26	2.85	\$4,928
CALDWELL	515	9	3.33	\$6,266
CAMDEN	77	1	2.00	\$3,192
CARTERET	677	24	6.17	\$12,377
CASWELL	144	4	3.00	\$3,334
CATAWBA	1,058	24	7.00	\$7,153
CHATHAM	279	10	2.90	\$6,453
CHEROKEE	460	16	1.81	\$3,410
CHOWAN	166	2	2.50	\$2,587
CLAY	146	0	0.00	\$0
CLEVELAND	804	28	4.29	\$6,081
COLUMBUS	893	45	2.47	\$4,685
CRAVEN	833	19	11.68	\$21,644
CUMBERLAND	2,295	50	4.18	\$7,671
CURRITUCK	173	0	0.00	\$0
DARE	343	9	5.44	\$12,928
DAVIDSON	1,068	29	5.00	\$8,162
DAVIE	263	6	4.83	\$5,146
DUPLIN	566	14	2.64	\$3,758
DURHAM	1,221	19	2.84	\$6,029
EDGECOMBE	566	10	3.30	\$6,527
FORSYTH	1,935	40	4.03	\$7,425
FRANKLIN	470	2	15.00	\$20,567
GASTON	1,116	33	2.79	\$4,710
GATES	138	5	4.20	\$5,792
GRAHAM	162	2	2.00	\$3,446

Table 6
NC Health Choice
Utilization by County of Residence
October 1999 Through September 2000

	<u>Members</u>	<u>Admissions</u>	<u>Average Length of Stay</u>	<u>Average Charge per Admission</u>
GRANVILLE	336	2	3.00	\$11,543
GREENE	190	1	2.00	\$13,943
GUILFORD	2,777	56	3.55	\$5,953
HALIFAX	550	17	3.53	\$5,664
HARNETT	636	27	4.22	\$5,415
HAYWOOD	608	21	3.76	\$5,117
HENDERSON	918	29	3.48	\$5,930
HERTFORD	252	5	3.60	\$8,559
HOKE	310	11	5.27	\$7,940
HYDE	100	6	6.33	\$14,236
IREDELL	640	19	3.95	\$6,839
JACKSON	369	12	2.42	\$4,931
JOHNSTON	976	33	3.15	\$4,229
JONES	199	3	1.33	\$3,600
LEE	533	10	5.00	\$6,466
LENOIR	704	35	3.17	\$4,186
LINCOLN	452	10	3.40	\$5,268
MACON	523	13	2.38	\$3,888
MADISON	266	5	4.20	\$4,019
MARTIN	277	6	2.00	\$3,007
MCDOWELL	372	9	4.56	\$7,565
MECKLENBURG	4,637	71	3.45	\$6,182
MITCHELL	220	6	2.83	\$5,406
MONTGOMERY	330	6	2.50	\$4,866
MOORE	737	17	3.41	\$7,926
NASH	906	14	2.79	\$7,181
NEW HANOVER	1,272	19	3.26	\$4,601
NORTHAMPTON	256	5	3.00	\$6,019
ONSLOW	1,254	25	2.88	\$5,897
ORANGE	608	21	6.62	\$10,264
PAMLICO	138	0	0.00	\$0
PASQUOTANK	437	9	4.56	\$5,259
PENDER	542	8	2.13	\$6,461
PERQUIMANS	166	1	5.00	\$4,674
PERSON	318	8	8.38	\$9,224
PITT	889	21	3.10	\$5,538
POLK	176	1	4.00	\$7,263
RANDOLPH	810	25	5.64	\$9,943

Table 6
NC Health Choice
Utilization by County of Residence
October 1999 Through September 2000

	<u>Members</u>	<u>Admissions</u>	<u>Average Length of Stay</u>	<u>Average Charge per Admission</u>
RICHMOND	558	46	2.67	\$4,175
ROBESON	1,780	41	4.56	\$6,076
ROCKINGHAM	632	29	4.03	\$5,962
ROWAN	803	28	4.07	\$6,970
RUTHERFORD	509	17	4.71	\$7,092
SAMPSON	615	22	3.45	\$4,734
SCOTLAND	462	10	1.80	\$4,064
STANLY	489	9	3.44	\$5,774
STOKES	321	10	1.90	\$4,270
SURRY	816	14	7.00	\$13,965
SWAIN	360	19	3.42	\$8,090
TRANSYLVANIA	311	10	5.20	\$5,757
TYRRELL	117	1	5.00	\$2,970
UNION	805	17	2.24	\$6,068
VANCE	565	9	5.11	\$6,574
WAKE	3,332	42	4.90	\$6,604
WARREN	263	3	6.00	\$12,963
WASHINGTON	145	5	5.60	\$8,308
WATAUGA	296	10	2.80	\$3,608
WAYNE	1,186	27	5.93	\$9,603
WILKES	427	17	2.82	\$5,586
WILSON	728	11	3.09	\$6,695
YADKIN	264	7	4.14	\$12,823
YANCEY	239	17	3.88	\$5,966

Table 7
NC Health Choice
Inpatient Utilization Statistics for Mental Disorders
At Acute Care General Hospitals
October 1998 Through September 2000

	<u>Non Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Admissions	45	130	40	66	.	1	85	197	--
Days	318	1,033	275	586	.	13	593	1,632	--
Admissions/10000	19.0	28.8	36.8	31.6	.	222.2	24.6	29.8	23.2
Days/10000	134.2	229.0	253.1	280.9	.	2,888.9	171.6	247.2	195.2
Average Length of Stay	7.07	7.95	6.88	8.88	.	13.00	6.98	8.28	8.41
Average Allowed Charge/Adm.	\$5,319	\$6,610	\$5,426	\$7,054	.	\$10,773	\$5,369	\$6,780	\$6,757
Average Allowed Charge/Day	\$753	\$832	\$789	\$794	.	\$829	\$770	\$818	\$803

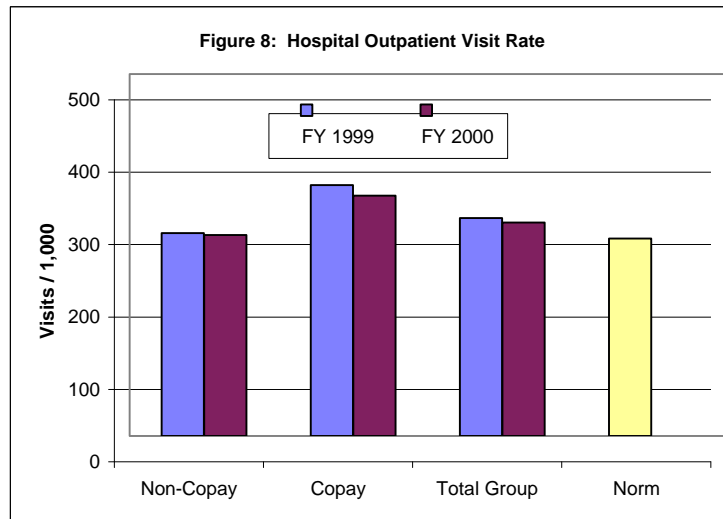
¹ Outlier claims (claims with a length of stay greater than 30 days or a total charge greater than \$50,000) have been excluded from these calculations.

Table 8
NC Health Choice
Inpatient Utilization Statistics for Mental Disorders
At Psychiatric Hospitals
October 1998 Through September 2000

	<u>Non Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Admissions	132	158	37	66	.	.	169	224	--
Days	1,409	1,581	350	859	.	.	1,759	2,440	--
Admissions/10000	55.7	35.0	34.1	31.6	.	.	48.9	33.9	17.7
Days/10000	594.5	350.5	322.1	411.8	.	.	508.9	369.7	150.4
Average Length of Stay	10.67	10.01	9.46	13.02	.	.	10.41	10.89	8.50
Average Allowed Charge/Adm.	\$5,895	\$5,792	\$5,519	\$5,791	.	.	\$5,813	\$5,792	\$5,106
Average Allowed Charge/Day	\$552	\$579	\$583	\$445	.	.	\$558	\$532	\$601

¹ Outlier claims (claims with a length of stay greater than 30 days or a total charge greater than \$50,000) have been excluded from these calculations.

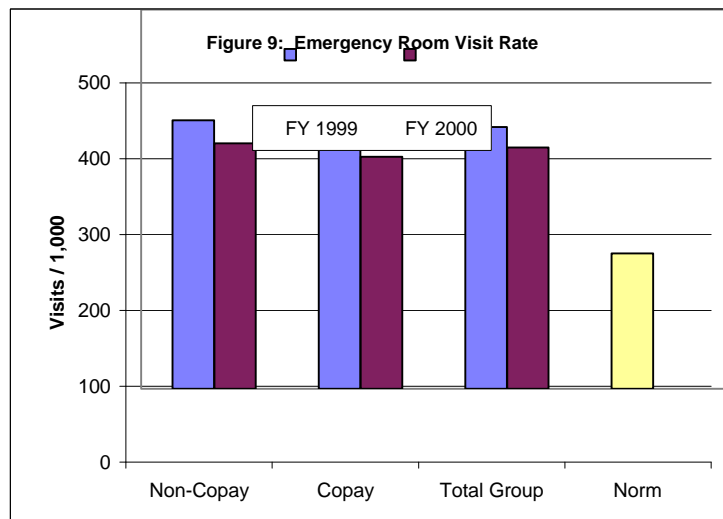
NC Health Choice Institutional Outpatient Utilization and Charges October 1998 Through September 2000



Utilization of the hospital outpatient setting remained relatively stable at 295 visits per 1,000 members in FY 2000 (Table 9). Utilization was 8 percent above the norm.

Although the visit rate for the Copay segment decreased slightly, it remained above that of the Non-Copay segment (which was virtually unchanged in FY 2000).

The average charge per visit was \$746. This was similar to that of FY 1999 (\$759) and was lower than the norm (\$840).



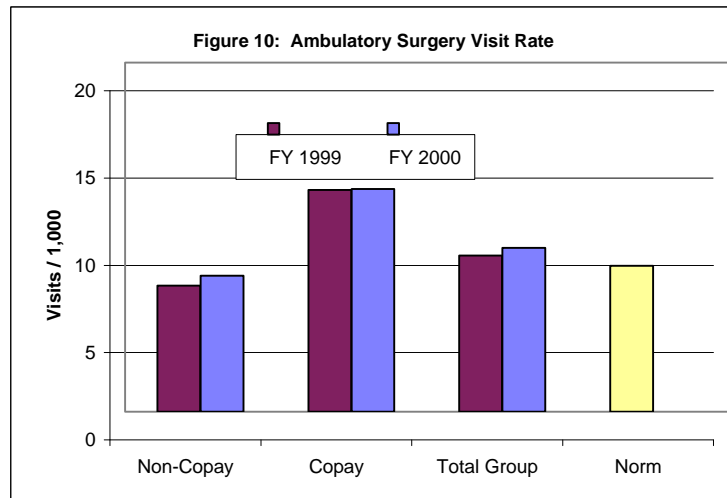
For the emergency room (ER) setting, utilization decreased 8 percent to 318.1 visits per 1,000 members in FY 2000.

Although the ER visit rate decreased for both segments, utilization remained well above the norm.

Use of the ER setting for non-emergencies remained high (see Table 10) especially among the Non-Copay members.

There was a slight increase in the average charge to \$418 per visit in FY 2000. This was below the norm (\$496).

NC Health Choice Institutional Outpatient Utilization and Charges October 1998 Through September 2000



The visit rate for the ambulatory surgery setting increased 5 percent to 9.4 visits per 1,000 members in FY 2000 (Table 9).

Utilization by Copay members continued to exceed that of Non-Copay members.

The average charge per visit rose slightly from FY 1999 and was slightly below the norm.

In all three settings, utilization by Copay members exceeded the norm. On the other hand, the average charge per visit was below the norm.

For the Non-Copay segment, utilization exceeded the norm in the hospital outpatient and ER settings. The average charge was below the norm in all settings.

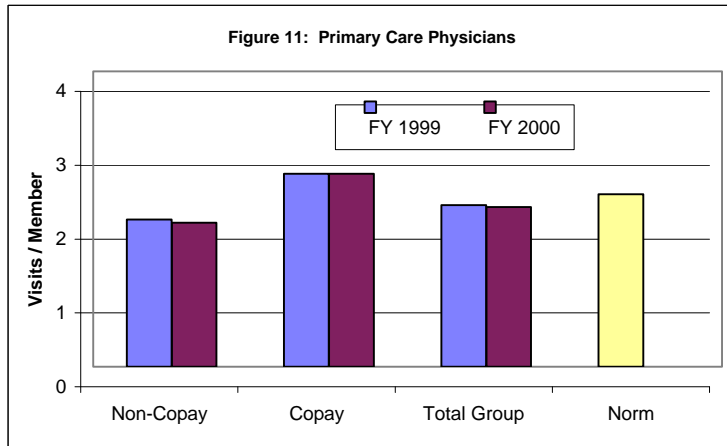
Table 9
NC Health Choice
Institutional Outpatient Utilization and Charge Statistics
October 1998 Through September 2000

	<u>Non-Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total Group</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Hospital Outpatient Dept.									
Visits	6,638	12,524	3,766	6,927	.	22	10,404	19,473	--
Visits/1,000	280.1	277.7	346.6	332.1	.	488.9	301.0	295.0	272.7
Av. Charge per Visit	\$720	\$726	\$829	\$782	.	\$1,197	\$759	\$746	\$840
Emergency Room									
Visits	8,388	14,606	3,543	6,380	.	12	11,931	20,998	--
Visits/1,000	353.9	323.8	326.1	305.9	.	266.7	345.2	318.1	178.7
Av. Charge per Visit	\$397	\$413	\$397	\$432	.	\$256	\$397	\$418	\$496
Ambulatory Surgical Centers									
Visits	171	351	138	266	.	3	309	620	--
Visits/1,000	7.2	7.8	12.7	12.8	.	66.7	8.9	9.4	8.4
Av. Charge per Visit	\$2,677	\$2,763	\$2,568	\$2,690	.	\$3,974	\$2,628	\$2,738	\$2,847

Table 10
NC Health Choice
Emergency Room Utilization Statistics
October 1998 Through September 2000

	<u>Non Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Total ER Utilization									
Visits	8,388	14,606	3,543	6,380	.	12	11,931	20,998	--
Visits/1,000	353.9	323.8	326.1	305.9	.	266.7	345.2	318.1	178.7
Av. Charge per Visit	\$397	\$413	\$397	\$432	.	\$256	\$397	\$418	\$496
Emergent									
Visits	1,708	3,137	762	1,395	.	2	2,470	4,534	--
Visits/1,000	72.1	69.6	70.1	66.9	.	44.4	71.5	68.7	48.8
Av. Charge per Visit	\$612	\$588	\$601	\$625	.	\$340	\$609	\$600	\$686
Urgent									
Visits	3,573	6,046	1,628	2,947	.	5	5,201	8,998	--
Visits/1,000	150.8	134.0	149.8	141.3	.	111.1	150.5	136.3	69.7
Av. Charge per Visit	\$350	\$392	\$363	\$406	.	\$334	\$354	\$397	\$450
Non-Urgent									
Visits	3,107	5,423	1,153	2,037	.	5	4,260	7,465	--
Visits/1,000	131.1	120.2	106.1	97.7	.	111.1	123.2	113.1	60.1
Av. Charge per Visit	\$331	\$334	\$310	\$335	.	\$145	\$326	\$334	\$396

NC Health Choice Office Setting Utilization October 1999 Through September 2000

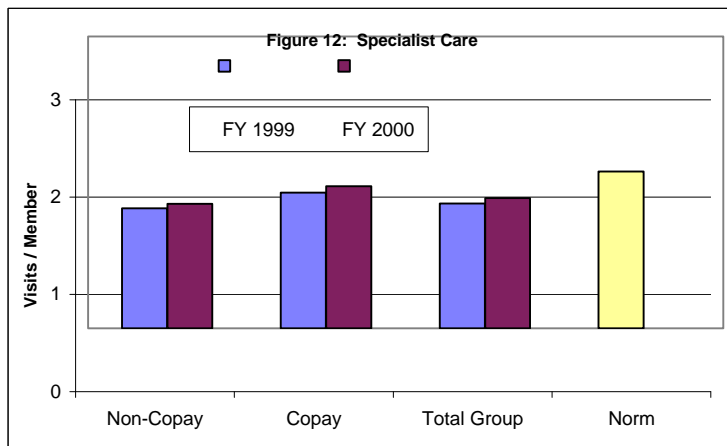


The primary care visit rate for the total group remained stable at 2.2 visits per 1,000 members (Table 11). The rate was 7 percent below the norm.

The visit rate for the Non-Copay members remained stable as did that of the Copay members.

Top diagnoses included health supervision of infant or child (18 percent), acute pharyngitis (8 percent), acute upper respiratory infections (6 percent), and ear infections (6 percent).

The average charge per visit increased to \$59 in FY 2000.



The specialist care visit rate for the total group increased slightly to 1.3 visits per 1,000 members. The rate was 17 percent below the norm.

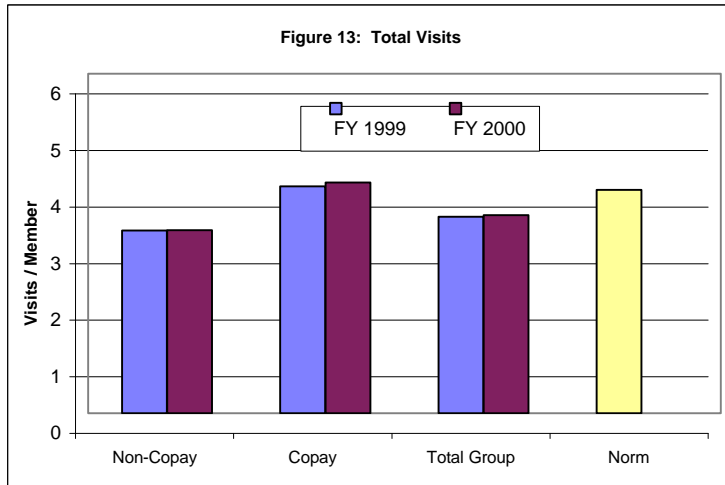
Both segments experience small increases in their visit rates during FY 2000.

Top diagnoses were vision disorders (10 percent) and allergic rhinitis (7 percent).

The most frequently visited specialists were chiropractors (11 percent).

The average charge per specialty visit increased to \$87.

NC Health Choice Office Setting Utilization October 1999 Through September 2000



The office visit rate for the total group remained stable at 3.5 admissions per member. The rate was 11 percent below the norm.

While the visit rate for the Non-Copay members was virtually unchanged, that of the Copay segment increased 2 percent in FY 2000.

The average charge per office visit in FY2000 was \$70, an increase of \$4 since FY 1999.

Utilization of outpatient mental health services increased 15 percent in FY 2000 (Table 12). Although utilization rose for both segments, the increase was more pronounced among Non-Copay members. Utilization was well above the norm.

There was a steep decline in visits for drug abuse; however there was a significant increase in visits for alcohol abuse (attributable to Non-Copay members). Utilization rates for both drug abuse and alcohol abuse treatment were below their respective norms.

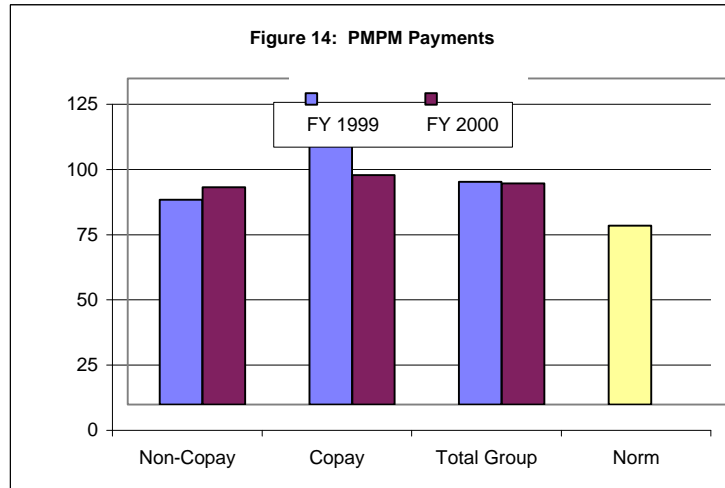
Table 11
NC Health Choice
Office Utilization and Charge Statistics
October 1999 Through September 2000

	<u>Non-Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total Group</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Total									
Visits	76,500	145,837	43,551	84,991	.	248	120,051	231,076	--
Visits per person	3.2	3.2	4.0	4.1	.	5.5	3.5	3.5	3.9
Av. Charge per Visit	\$67	\$70	\$66	\$69	.	\$80	\$66	\$70	\$70
Primary Care Utilization									
Visits	47,270	88,053	28,399	54,530	.	145	75,669	142,728	--
Visits per person	2.0	2.0	2.6	2.6	.	3.2	2.2	2.2	2.3
Av. Charge per Visit	\$56	\$59	\$55	\$58	.	\$58	\$56	\$59	\$58
Specialist Care Utilization									
Visits	29,230	57,784	15,152	30,461	.	103	44,382	88,348	--
Visits per person	1.2	1.3	1.4	1.5	.	2.3	1.3	1.3	1.6
Av. Charge per Visit	\$83	\$87	\$85	\$87	.	\$112	\$84	\$87	\$88

Table 12
NC Health Choice
Outpatient Mental Health Utilization Statistics
October 1999 Through September 2000

	<u>Non-Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total Group</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Mental Health									
Visits per 1,000 Members	633.6	742.1	609.9	673.1		2,977.8	626.2	721.8	652.3
Av. Visits per Member with at Least One Visit	5.5	6.4	5.9	6.2		7.4	5.7	6.5	7.3
Alcohol Abuse									
Visits per 1,000 Members	0.3	1.8	0.6	0.4		0.0	0.4	1.3	1.7
Av. Visits per Member with at Least One Visit	1.3	6.6	2.3	1.8		0.0	1.7	5.2	6.9
Drug Abuse									
Visits per 1,000 Members	18.9	9.9	36.6	4.7		0.0	24.5	8.3	8.9
Av. Visits per Member with at Least One Visit	18.7	12.4	24.9	5.8		0.0	21.2	10.3	9.9
Grand Total									
Visits per 1,000 Members	652.9	753.7	647.2	678.3		2,977.8	651.1	731.4	662.9
Av. Visits per Member with at Least One Visit	5.7	6.5	6.2	6.2		7.4	5.8	6.6	7.4

NC Health Choice Payments Per Member Per Month October 1998 Through September 2000



The payment per member per month (pmpm) for the total group remained relatively stable during FY 2000 at \$84.82 (Table 13). This was higher than the norm.

While payments for the Non-Copay segment increased 6 percent, those of the Copay segment dropped 12 percent.

For the Non-Copay segment, professional payments grew \$6 reflecting a significant rise in payments for prescription drugs.

For the Copay members, institutional payments fell \$16 reflecting the decrease in inpatient utilization. Professional payments increased \$4 due primarily to higher payments for prescription drugs.

Institutional payments for both segments were similar to the norm. Professional payments exceeded the norm.

Payments for several diagnostic categories were significantly higher than the norm (Table 15). Payments for mental disorders, diseases of the nervous system, respiratory diseases, ill defined conditions, and other (including drugs) were all higher than the norm. Except for payments in the other (including drugs) category, payments were consistent with those of FY 1999 (data not shown).

Dental payments (which were not included in the figures above) were \$10 per member per month in FY 2000 (Table 16). Payments increased more than \$3 pmpm since FY 1999.

Payments for special needs claims remained under \$1 pmpm.

Costly admissions (admissions which incurred costs greater than \$50,000 or hospital stays greater than 30 days) added nearly \$4 to the pmpm payment (Table 17).

Table 13
NC Health Choice
Per Member per Month Payments, by Place of Service
October 1998 Through September 2000

	<u>Non-Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total</u>		<u>Norm</u>
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	
Institutional									
Acute Care									
Inpatient	\$10.51	\$10.93	\$24.47	\$10.77	--	\$40.73	\$14.90	\$10.90	\$17.11
Outpatient	\$18.20	\$18.09	\$21.93	\$20.88	--	\$41.35	\$19.37	\$18.99	\$12.91
Specialty									
Inpatient	\$2.80	\$1.64	\$2.43	\$1.29	--	\$0.00	\$2.68	\$1.53	\$0.91
Outpatient	\$0.76	\$0.50	\$0.72	\$0.56	--	\$0.00	\$0.75	\$0.52	\$1.03
Total Institutional	\$32.27	\$31.15	\$49.54	\$33.50	--	\$82.08	\$37.70	\$31.93	\$31.96
Professional									
Inpatient	\$3.07	\$3.06	\$5.14	\$3.91	--	\$5.75	\$3.72	\$3.33	\$4.16
Outpatient	\$9.50	\$8.89	\$11.42	\$10.43	--	\$22.60	\$10.10	\$9.39	\$6.03
Office	\$22.34	\$23.84	\$24.87	\$26.29	--	\$53.29	\$23.13	\$24.64	\$14.67
Drugs	\$9.90	\$14.15	\$7.77	\$11.64	--	\$24.05	\$9.23	\$13.37	\$9.06
Other	\$1.46	\$2.15	\$1.70	\$2.22	--	\$1.95	\$1.53	\$2.17	\$2.71
Total Professional	\$46.26	\$52.09	\$50.90	\$54.50	--	\$107.65	\$47.72	\$52.89	\$36.64
Grand Total	\$78.54	\$83.24	\$100.44	\$88.00	--	\$189.73	\$85.42	\$84.82	\$68.59

Table 14
NC Health Choice
Total Payments by Place of Service
October 1998 Through September 2000

	<u>Non-Copay</u>		<u>Copay</u>		<u>Ext Coverage</u>		<u>Total</u>	
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>FY 2000</u>
Institutional								
Acute Care								
Inpatient	\$2,990,017	\$5,913,930	\$3,190,885	\$2,694,844	--	\$21,995	\$6,180,902	\$8,630,769
Outpatient	\$5,176,633	\$9,790,595	\$2,858,979	\$5,226,996	--	\$22,330	\$8,035,611	\$15,039,922
Specialty								
Inpatient	\$795,946	\$886,098	\$316,772	\$323,259	--	\$0	\$1,112,718	\$1,209,357
Outpatient	\$216,612	\$270,187	\$93,379	\$141,246	--	\$0	\$309,990	\$411,433
Total Institutional	<u>\$9,179,207</u>	<u>\$16,860,810</u>	<u>\$6,460,015</u>	<u>\$8,386,346</u>	<u>\$0</u>	<u>\$44,325</u>	<u>\$15,639,222</u>	<u>\$25,291,481</u>
Professional								
Inpatient	\$873,959	\$1,657,747	\$669,735	\$978,010	--	\$3,104	\$1,543,694	\$2,638,861
Outpatient	\$2,700,958	\$4,810,797	\$1,488,426	\$2,611,809	--	\$12,206	\$4,189,383	\$7,434,813
Office	\$6,353,170	\$12,905,842	\$3,242,786	\$6,580,442	--	\$28,779	\$9,595,956	\$19,515,063
Drugs	\$2,814,875	\$7,659,288	\$1,013,484	\$2,914,191	--	\$12,986	\$3,828,359	\$10,586,465
Other	\$414,792	\$1,161,502	\$221,925	\$556,899	--	\$1,054	\$636,717	\$1,719,455
Total Professional	<u>\$13,157,755</u>	<u>\$28,195,176</u>	<u>\$6,636,355</u>	<u>\$13,641,351</u>	<u>\$0</u>	<u>\$58,130</u>	<u>\$19,794,110</u>	<u>\$41,894,657</u>
Grand Total	<u>\$22,336,962</u>	<u>\$45,055,986</u>	<u>\$13,096,370</u>	<u>\$22,027,696</u>	<u>\$0</u>	<u>\$102,455</u>	<u>\$35,433,331</u>	<u>\$67,186,138</u>

Table 15
NC Health Choice
PMPM Payments by Diagnostic Category
October 1999 Through September 2000

	<u>Total Payments</u>	<u>Payments per Member per</u> <u>Month</u>	
	<u>NCHC</u>	<u>NCHC</u>	<u>Norm</u>
Infectious and Parasitic Diseases	\$1,849,115	\$2.33	\$0.99
Neoplasms	\$1,578,772	\$1.99	\$2.63
Endocrine, Nutritional and Metabolic Diseases and Immunity Disorders	\$1,398,930	\$1.77	\$1.62
Diseases of Blood and Blood-Forming Organs	\$671,743	\$0.85	\$1.47
Mental Disorders	\$5,834,757	\$7.37	\$4.87
Diseases of the Nervous System and Sense Organs	\$7,151,588	\$9.03	\$4.69
Circulatory Diseases	\$716,194	\$0.90	\$1.02
Respiratory Diseases	\$8,651,604	\$10.92	\$5.54
Digestive Diseases	\$3,572,735	\$4.51	\$2.88
Genitourinary Diseases	\$2,441,356	\$3.08	\$1.74
Pregnancies	\$122,714	\$0.15	\$0.13
Skin Diseases	\$1,405,076	\$1.77	\$0.82
Musculoskeletal Diseases	\$2,980,094	\$3.76	\$3.87
Congenital Anomalies	\$1,502,265	\$1.90	\$3.22
Perinatal Conditions	\$60,021	\$0.08	\$6.68
Ill-Defined Conditions	\$5,790,415	\$7.31	\$3.94
Injury and Poisoning	\$8,283,502	\$10.46	\$8.96
Other (Includes Drugs)	\$13,175,255	\$16.63	\$4.51

Table 16
NC Health Choice
Frequency and Costs of Select Office Procedures
October 1999 Through September 2000

	<u>Non-Copay</u>	<u>Copay</u>	<u>Total Group</u>
Dental			
Claims	96,447	46,703	143,229
Payments PMPM	\$9.92	\$10.49	\$10.10
Hearing			
Claims	38	22	60
Payments PMPM	\$0.03	\$0.03	\$0.03
Immunization			
Claims	5,417	5,590	11,015
Payments PMPM	\$0.13	\$0.30	\$0.19
Vision			
Claims	9,405	3,663	13,075
Payments PMPM	\$1.15	\$0.94	\$1.08
Well Child			
Claims	10,603	8,022	18,644
Payments PMPM	\$1.07	\$1.70	\$1.27
Special Needs ¹			
Claims	10,647	3,915	14,628
Payments PMPM	\$0.97	\$0.70	\$0.89

¹ Includes institutional as well as professional claims.

Table 17
NC Health Choice
Catastrophic Admissions¹ to Acute Care Hospitals
October 1999 Through September 2000

<u>Diagnosis</u>	<u>APDRG</u>	<u>Age</u>	<u>Sex</u>	<u>Length of Stay</u>	<u>Charged</u>	<u>Paid</u>	<u>Provider</u>	<u>Transplant</u>	<u>Segment</u>
CONGENITAL ANOMALY OF HEART	795	9	M	125	\$735,454	\$740,576	DUKE UNIVERSITY HOSPITAL	HEART/LUNG	Copay
ENTEROVIRUS DISEASE OF CNS	483	16	F	102	\$263,809	\$258,981	UNC HOSPITALS		Copay
PULMONARY HEART DISEASE	546	16	F	42	\$177,110	\$175,646	UNC HOSPITALS		Non-Copay
LEUKEMIA	780	15	M	96	\$174,678	\$174,558	PITT CO MEMORIAL		Non-Copay
INTRACRANIAL ABSCESS	483	15	M	68	\$155,739	\$154,445	NC BAPTIST		Non-Copay
OTHER HEMORRHAGIC CONDITIONS	574	8	F	62	\$150,773	\$142,586	DUKE UNIVERSITY HOSPITAL		Non-Copay
LUPUS	468	6	F	51	\$124,211	\$119,289	UNC HOSPITALS		Non-Copay
SPINAL CORD INJURY	462	17	F	51	\$123,353	\$176,588	OUT-OF-STATE		Copay
BURN OF ABDOMINAL WALL	472	8	F	10	\$102,822	\$102,822	UNC HOSPITALS		Non-Copay
REHABILITATION	462	6	M	90	\$93,329	\$87,465	PITT CO MEMORIAL		Non-Copay
PNEUMONIA	462	1	F	40	\$85,691	\$87,610	DUKE UNIVERSITY HOSPITAL		Copay
LUNG DISEASE	462	18	F	46	\$85,232	\$95,058	UNC HOSPITALS		Copay
SPINAL CORD INJURY	462	17	M	53	\$73,108	\$89,525	UNC HOSPITALS		Copay
COMPLICATIONS OF MEDICAL DEVICE	530	17	M	22	\$71,155	\$68,423	DUKE UNIVERSITY HOSPITAL		Non-Copay
DEPRESSIVE DISORDER	426	13	F	92	\$69,903	\$69,537	OUT-OF-STATE		Non-Copay
INJURY TO NERVOUS SYSTEM	483	8	M	15	\$66,498	\$65,757	UNC HOSPITALS		Non-Copay
CONGENITAL ANOMALY	104	11	M	5	\$65,983	\$65,126	DUKE UNIVERSITY HOSPITAL		Non-Copay
FRACTURE OF FEMUR	231	7	M	25	\$59,491	\$59,436	UNION MEMORIAL		Non-Copay
FRACTURE OF FEMUR	235	15	M	40	\$56,568	\$57,670	NEW HANOVER REGIONAL MED		Non-Copay
CONGENITAL ANOMALY OF HEART	105	2	F	4	\$54,601	\$51,330	UNC HOSPITALS		Copay
CONGENITAL ANOMALY OF HEART	105	2	F	5	\$52,005	\$49,952	DUKE UNIVERSITY HOSPITAL		Non-Copay
SKIN CONDITION	265	7	M	23	\$50,733	\$50,733	NC BAPTIST		Non-Copay
CHEMOTHERAPY	577	16	F	37	\$46,679	\$46,679	UNC HOSPITALS		Non-Copay
LUNG DISEASE	541	2	F	34	\$42,759	\$42,092	UNC HOSPITALS		Non-Copay
PNEUMONIA	740	18	F	31	\$41,482	\$41,170	UNC HOSPITALS		Copay
URINARY TRACT INFECTION	425	18	F	53	\$38,738	\$50,097	UNC HOSPITALS		Non-Copay
ATTENTION DEFICIT DISORDER	431	7	M	41	\$27,061	\$0	UNC HOSPITALS		Copay
AFFECTIVE PSYCHOSES	430	5	M	35	\$23,408	\$23,251	ADOL ALCOH & CHEM		Non-Copay